A tool for understanding environmental decisions related to the pulp and paper industry



EFFECTS OF DECREASED GREENHOUSE GAS EMISSIONS ON EMISSIONS TO AIR

EMISSIONS TO AIR

Avoiding Emissions Elsewhere in Society

Reducing greenhouse gas emissions associated with the end of life of forest products will normally have little effect on SO₂, NOx, and particulate emissions unless the used product, or the gas collected from landfills, is used as a source of energy, displacing fossil fuels. Burning non-recyclable used paper and paperboard products, wood, or methane from landfills, in place of fossil fuels can reduce societal greenhouse gas (GHG) emissions. The associated effects on SO₂, NOx, and particulate emissions will depend on the specific fuel substitution involved. These fuel substitution effects are discussed in the section Energy Used in Manufacturing.

Likewise, societal GHG emissions can be reduced by displacing high GHG-intensity electricity from the grid with low GHG-intensity power. The effects on SO₂, NOx and particulate emissions will depend on the types and amounts of fuels used to produce the "green" power and the grid power. Generally, the direction of the impact (co-benefit or trade-off) will be the same as presented in the section Energy Used in Manufacturing.

References

- Intergovernmental Panel on Climate Change (IPCC). 2006. Stationary combustion. Chapter 2 in *Energy*. Volume 2 in 2006 IPCC guidelines for national greenhouse gas inventories. <u>http://www.ipcc-nggip.iges.or.jp/public/2006gl/index.html</u>
- United States Environmental Protection Agency (USEPA). 1998. Chapter 1, Sections 1.1 to 1.6. External combustion sources. In *Compilation of air pollutant emission factors, Volume 1: Stationary point and area sources.* Research Triangle Park, NC: U. S. Environmental Protection Agency, Office of Air Quality Planning and Standards.